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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/867,236

05/29/2001

Gregory Agami

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09/22/2004

MOTOROLA, INC.

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SCHAUMBURG, IL 60196

EXAMINER

WARE, CICELY Q

ART UNIT

PAPER NUMBER

2634

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/867,236	Applicant(s) AGAMI ET AL.	
	Examiner Cicely Ware	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-15 is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 4 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5,6 and 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Jou (US Patent 6,389,000).

(1) With regard to claim 1, Jou discloses in (Figs. 1 and 2) an apparatus for data transmission within a spread-spectrum communication system, the apparatus comprising: a long-code scrambler (Fig. 1 (8, 12), Fig. 2 (82, 62a-c)) having data symbols as an input and outputting the data symbols scrambled with a long code; and a modulator (Fig. 1 (20a-c), Fig. 2 (68a-c)) having the scrambled data symbols as an input and outputting modulated scrambled data symbols (col. 1, lines 38-40, 53-56, col. 2, lines 43-48, 52-53, 59-60, col. 6, lines 66-67, col. 7, lines 1-2, col. 8, lines 66-67).

(2) With regard to claim 2, claim 2 inherits all the limitations of claim 1. Jou further discloses wherein the modulator maps the scrambled data symbols to a constellation (Fig. 1(16a-c), col. 2, lines 59-60, col. 7, lines 18-22, 55).

(3) With regard to claim 3, claim 3 inherits all the limitations of claim 2. Jou further discloses wherein the modulator is a quadrature amplitude modulator (Fig. 1 (16a-c, 20a-c), col. 2, lines 59-60).

It is well known in the art that quadrature amplitude modulation is interchangeable with QPSK.

(4) With regard to claim 5, Jou further discloses in (Fig. 3) an apparatus for reception (102) of transmitted signals within a spread-spectrum communication system, the apparatus comprising: a demodulator (106a-c) having a transmitted signal as an input and outputting a demodulated signal; and a long-code desreader (108a-c) having the demodulated signal as an input and outputting despread data.

(5) With regard to claim 6, claim 6 inherits all the limitations of claim 5. Jou further discloses in (Fig. 3) wherein the demodulator is a quadrature amplitude demodulator (108a-c, 110a-c) (col. 9, lines 19-38).

(6) With regard to claim 8, claim 8 inherits all the limitations of claim 1.

(7) With regard to claim 9, claim 9 inherits all the limitations of claims 8 and 2.

(8) With regard to claim 10, claim 10 inherits all the limitations of claims 9 and 3.

(9) With regard to claim 11, claim 11 inherits all the limitations of claim 5.

(10) With regard to claim 12, claim 12 inherits all the limitations of claims 11 and 6.

Allowable Subject Matter

5. Claims 4 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 13-15 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter: The instant application discloses an apparatus for data transmission within a spread-spectrum communication system. Prior art references show similar methods but fail to teach: **“a permuter having the decimated long code as an input and outputting a plurality of permuted, decimated long codes”**, as in claim 13.

Conclusion

8. The prior art made record of and not relied upon is considered pertinent to applicant's disclosure:

- a. Sundhushayana et al. US Patent Application 2003/0053435 A1 discloses an enhanced channel interleaving for optimized data throughput.
- b. McAuliffe et al. US Patent 5,111,389 discloses an aperiodic mapping system using power-of-two stride access to interleaved devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cicely Ware whose telephone number is 703-305-8326. The examiner can normally be reached on Monday – Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Art Unit: 2634

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Cicely Ware

cqw
September 2, 2004



STEPHEN CHIN
SUPERVISORY PATENT EXAMINE
TECHNOLOGY CENTER 2600